

in abundance to prove his hypothesis and to emphasize the importance of such factors as intestinal stasis, improper breathing and toxin states in producing certain morbid conditions. These morbid conditions are described largely in terms of vagus or sympathetic activity and include breathlessness, cyanosis, exhaustion, headache, hyperalgesia, pain, tachycardia, fever and other similar conditions. The book abounds in repetitions, and one feels after reading it that one has accompanied the author through many tedious observations and explanations, but carried away very little of value regarding the early symptoms and treatment of circulatory disease in general practice.

J. H. A.

LEHRBUCH DER GRENZGEBIETE DER MEDIZIN UND ZAHNHEILKUNDE.
By JULIUS MISCH, dentist, Berlin, with the collaboration of a number of physicians. Second edition. Two volumes, pp. 1363; 351 illustrations. Leipzig: F. C. W. Vogel, 1922.

This book is stated to be for students, dentists and physicians. The various sections of the book are written by physicians in conjunction with Dr. Misch and apparently the effort has been made to present the subject-matter from the viewpoints both of physicians and dentists. The oral and particularly the dental manifestations of the various ills the body is heir to are exhaustively discussed, as well as the general effects of disorders of the teeth. The many illustrations, for the most part, are excellent.

There has been real need for a book of this sort and it has already enjoyed a deserved popularity in Germany. Its usefulness could be increased by the elimination of a great deal of unnecessarily lengthy discussion of the diagnosis and treatment of systemic diseases.

C. C. W.

SURGICAL CLINICS OF NORTH AMERICA. VOL. I, No. 6 (NEW YORK NUMBER). Pp. 295; 122 illustrations. Philadelphia and London: W. B. Saunders Company, 1922.

This number of the Clinics is an especially interesting one, taking up, as it does, thoracic surgery, cord surgery, some features of abdominal surgery and miscellaneous subjects. The contributors are all men well known in their line and in most instances the subjects chosen by them for this publication express the direction of their chief accomplishments. For this reason the reader probably gets the very best data on that particular condition and its treatment.

It is exceedingly interesting and instructive reading and shows very well the steady improvement and advance in surgical diagnosis and technic.

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PROGRESS OF MEDICAL SCIENCE

MEDICINE

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Hemosiderosis of Pernicious Anemia.—McMASTER, ROUS and LARIMORE (*Jour. Exp. Med.*, 1922, 25, 521) point out that in recent years pernicious anemia has been thought by many to be due to an injurious agent derived from the gastro-intestinal tract. One of the findings which has been considered well-nigh conclusive in support of this idea is the marked siderosis of the liver parenchyma, which has been taken to indicate that pathological blood destruction is localized within the portal tributaries. They show experimentally that this hemosiderosis is inconclusive evidence of blood destruction within the portal system. Young rabbits were injected subcutaneously with varying amounts of rabbit hemoglobin on six days out of every seven. The injection periods ranged from thirteen to one hundred and two days, the hemoglobin dose from $\frac{1}{4}$ of that normally possessed by the animal to $\frac{1}{10}$ of it. The liver, kidneys, spleen and red bone marrow were studied with reference to their hemosiderin content. The following results were obtained. The distribution of the hemosiderin depended on the amount of hemoglobin given. No siderosis occurred when a daily portion less than $\frac{1}{10}$ was employed. When slightly larger doses were used over long periods of time a siderosis of the liver occurred, similar to that in pernicious anemia, whereas the kidneys were non-pigmented or negligibly so. When more hemoglobin was used the differences in the organs became less noteworthy and when very large injections were given resulting in hemoglobinuria after but a few days, the epithelium of the renal tubules was heavily pigmented and the liver cells by con-

trast negligibly so. In these experiments they show that the constant presence in the general, as distinct from the specifically portal, circulation of a small amount of free hemoglobin, leads eventually to a siderosis of the liver similar to that which has been considered so significant in pernicious anemia. When this amount is kept within certain limits, renal siderosis fails to appear or is negligible in degree. When more is given the epithelium of the renal tubules rapidly becomes pigmented, the iron deposition far outstripping that in the liver. Their conception of the phenomenon is that the liver is able to remove free hemoglobin from the blood stream, and normally is probably the organ which keeps the plasma free of hemoglobin. When the hemoglobin coming to it is increased, it may still receive it but in so doing become siderosed. When hemolysis is considerable the liver is overtaxed and the pigment accumulates in the blood and is dealt with by the kidneys according to its threshold of excretion. The hemosiderin passes readily through the glomeruli but undergoes a greater or less resorption during its passage through the tubules and renal siderosis comes about. They believe that the variations in distribution of hemosiderin in pernicious anemia are rendered understandable by these facts.

Tularemia Francis 1921. A New Disease of Man.—FRANCIS' (*Jour. Am. Med. Assn.*, 1922, 78, 1015) report has to do with one of a series of most important observations which have been carried on by McCoy and his associates of the United States Public Health Service, the impetus for which was received during the fight against plague in California in 1911. At that time McCoy recognized a plague-like disease of rodents, which was differentiated from true plague, and of which tularemia was later found to be the etiological agent. This plague-like disease has been found in squirrels, rabbits and guinea-pigs, being transmitted by various insects. Of importance to the profession is the discovery that this disease occurs in man from sources of infection in California, Indiana and Utah and that it is readily contracted by laboratory workers intimately associated with experimental work upon this infection. When the disease is contracted by insect bite it is characterized by a well-marked reaction at the site of infection, which is followed after a brief incubation by lymphadenitis of the regional glands, chills and fever and prostration for a period of from one to four weeks. Laboratory workers contracted the disease without obvious sites of infection; they all showed a sudden onset of fever, without other definite manifestations, which lasted with remissions about three weeks. All of the trained workers of the service who were immediately concerned with the investigation had the infection and showed characteristic immunological reactions. Francis points out that "the ready susceptibility of man to this infection in Nature and in the laboratory, its wide prevalence in Nature in a number of rodents, and the growing number of blood-sucking insects found capable of conveying the infection, should combine to put the medical profession of the United States on the watch for cases of this new disease of man."

Length of Life of Transfused Erythrocytes.—WEARN and his co-workers (*Arch. Int. Med.*, 1922, 29, 527), using the technic devised by Ashby determined the duration of the existence of Group IV trans-

fused red blood corpuscles in the circulation of patients whose blood belonged to Group II. Four cases of pernicious anemia and four of anemia secondary to nephritis were studied. The last of the transfused red blood cells disappeared from the circulation in from fifty-nine to one hundred and thirteen days, with an average of eighty-three days. No difference was noted between the duration of the stay of the transfused cells in the circulation of patient with primary and secondary anemia. One of the cases of pernicious anemia (Group II) was transfused with blood from another case of pernicious anemia (Group IV) and in this instance the transfused cells behaved as did the corpuscles from normal donors.

SURGERY

UNDER THE CHARGE OF

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A Consideration of the Relative Merits of Resection and Gastro-enterostomy in the Treatment of Gastric and Duodenal Ulcer.—DE QUERVAIN (*Surg. Gynec. and Obstet.*, 1922, 34, 1) says that he has abandoned schematic gastro-enterostomy and leans more toward resection. Ninety per cent of ulcer recurrences, peptic ulcer and other disturbances, occur in the first four years after operation, so that statistics which depend on results reported earlier are apt to show too favorable results. Simple gastro-enterostomy produces in all forms of gastric ulcer about the same early results—somewhat more than four-fifths cure or improvement approximating cure. In ulcers at a distance from the pylorus the average results are no less favorable than in those at the pylorus. With sleeve resection, there is no late bleeding from the ulcer with the resultant occasional death and the danger from peptic ulcer is almost nil.

Benign Tumors of the Stomach.—EUSTERMANN and SENTY (*Surg. Gynec. and Obstet.*, 1922, 35, 5) say that benign tumors of the stomach are rare and constitute only 1.3 per cent of all gastric tumors that have come to operation. The actual proportion of benign new growths to malignant new growths or ulcerations is as 1 to 200. Myomata and fibromata constitute the largest group, gastric polyposis the most infrequent. About 50 per cent of benign tumors are found in patients more than forty years old. There is no characteristic syndrome and gastric chemism ranges from achylia to hyperacidity with hypersecretion. The summation of evidence favors the diagnosis of gastric cancer. The majority of tumors are situated in the region of the pylorus, the greater curvature, anterior and posterior walls. The smaller tumors are